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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			<i>Complete if Known</i>		
			Application Number	10/693,419	
			Filing Date	2003-10-23	
			First Named Inventor	J. RODNEY WALTON	
			Art Unit	2467	
			Examiner Name	SMITH, MARCUS	
Sheet	1	of	11	Attorney Docket No: 020554	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	001	US5241544	08-31-1993	JASPER; Steven C. et al.	
	002	US5295159	03-15-1994	KERPEZ; Kenneth J.	
	003	US5471647	11-28-1995	GERLACH; Derek. et al.	
	004	US5606729	02-25-1997	D'AMICO; Thomas V. et al.	
	005	US5867478	02-02-1999	BAUM; Kevin Lynn. et al.	
	006	US5886988	03-23-1999	YUN; Louis C. et al.	
	007	US6084915	07-04-2000	WILLIAMS; Richard G. C.	
	008	US6131016	10-10-2000	GREENSTEIN; Lawrence Joel. et al.	
	009	US6141567	10-31-2000	YOUSSEFMIR; Michael. et al.	
	010	US6167031	12-26-2000	OLOFSSON; H.ang.kan Gunnar. et al.	
	011	US6178196	01-23-2001	NAGUIB; Ayman F. et al.	
	012	US6232918	05-15-2001	WAX; Mati. et al.	
	013	US6266528	07-24-2001	FARZANEH; Farhad.	
	014	US6278726	08-21-2001	MESECHER; David K. et al.	
	015	US6298035	10-02-2001	HEISKALA; Juha.	
	016	US6308080	10-23-2001	BURT; Donald G. et al.	
	017	US6314289	11-06-2001	EBERLEIN; Ernst. et al.	
	018	US6339399	01-15-2002	ANDERSSON; Soren. et al.	
	019	US6346910	02-12-2002	ITO; Tei.	

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	020	US6348036	02-19-2002	LOONEY; Christopher S. et al.	
	021	US6377812	04-23-2002	RASHID-FARROKHI; Farrokh. et al.	
	022	US6385264	05-07-2002	TERASAWA; Daisuke. et al.	
	023	US6452981	09-17-2002	RALEIGH; Gregory G. et al.	
	024	US6473467	10-29-2002	WALLACE; Mark. et al.	
	025	US6532562	03-11-2003	CHOU; Philip A. et al.	
	026	US6574211	06-03-2003	PADOVANI; Roberto. et al.	
	027	US6574271	06-03-2003	MESECHER; David K. et al.	
	028	US6594798	07-15-2003	CHOU; Philip A. et al.	
	029	US6608874	08-19-2003	BEIDAS; Bassel F. et al.	
	030	US6611231	08-26-2003	CRILLY; Jr. William J. et al.	
	031	US6615024	09-02-2003	BOROS; Tibor. et al.	
	032	US6654590	11-25-2003	BOROS; Tibor. et al.	
	033	US6668161	12-23-2003	BOROS; Tibor. et al.	
	034	US6683916	01-27-2004	SARTORI; Philippe Jean-Marc. et al.	
	035	US6690660	02-10-2004	KIM; Younglok. et al.	
	036	US6738020	05-18-2004	LINDSKOG; Erik D. et al.	
	037	US6751187	06-15-2004	WALTON; Jay R. et al.	
	038	US6751444	06-15-2004	MEIYAPPAN; Palaniappan.	

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	039	US6751480	06-15-2004	KOGIANTIS; Achilles George. et al.	
	040	US6760388	07-06-2004	KETCHUM; John W. et al.	
	041	US6771706	08-03-2004	LING; Fuyun. et al.	
	042	US6785341	08-31-2004	WALTON; Jay R. et al.	
	043	US6788948	09-07-2004	LINDSKOG; Erik D. et al.	
	044	US6795424	09-21-2004	KAPOOR; Samir. et al.	
	045	US6802035	10-05-2004	CATREUX; Severine. et al.	
	046	US6850498	02-01-2005	HEATH; Robert W. et al.	
	047	US6859503	02-22-2005	PAUTLER; Joseph J. et al.	
	048	US6873651	03-29-2005	TESFAL; Yohannes. et al.	
	049	US6879578	04-12-2005	PAN; Jung-Lin. et al.	
	050	US6885708	04-26-2005	THOMAS; Timothy A. et al.	
	051	US6888809	05-03-2005	FOSCHINI; Gerard Joseph. et al.	
	052	US6937592	08-30-2005	HEATH; Jr. Robert W. et al.	
	053	US6963742	11-08-2005	BOROS; Tibor. et al.	
	054	US6965762	11-15-2005	SUGAR; Gary L. et al.	
	055	US6985434	01-10-2006	WU; Shiquan. et al.	
	056	US7031671	04-18-2006	MOTTIER; David.	
	057	US7062294	06-13-2006	ROGARD; Roger. et al.	
	058	US7072381	07-04-2006	ATARASHI; Hiroyuki. et al.	

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	059	US7072410	07-04-2006	MONSEN; Peter.	
	060	US7072413	07-04-2006	WALTON; Jay R. et al.	
	061	US7088671	08-08-2006	MONSEN; Peter.	
	062	US7099377	08-29-2006	BERENS; Friedbert. et al.	
	063	US7110378	09-19-2006	ONGGOSANUSI; Eko Nugroho. et al.	
	064	US7110463	09-19-2006	WALLACE; Mark S. et al.	
	065	US7113499	09-26-2006	NAFIE; Mohammed. et al.	
	066	US7149254	12-12-2006	SAMPATH; Hemanth.	
	067	US7155171	12-26-2006	EBERT; Paul Michael. et al.	
	068	US7187646	03-06-2007	SCHRAMM; Peter.	
	069	US7197084	03-27-2007	KETCHUM; John W. et al.	
	070	US7200404	04-03-2007	PANASIK; Carl M. et al.	
	071	US7206354	04-17-2007	WALLACE; Mark S. et al.	
	072	US7218684	05-15-2007	BOLOURCHI; Nader. et al.	
	073	US7224704	05-29-2007	LU; Xiaolin. et al.	
	074	US7231184	06-12-2007	EILTS; Henry S. et al.	
	075	US7233625	06-19-2007	MA; Jianglei. et al.	
	076	US7248638	07-24-2007	BANISTER; Brian C.	
	077	US7254171	08-07-2007	HUDSON; John E.	
	078	US7263119	08-28-2007	HSU; Yungping. et al.	
	079	US7280625	10-09-2007	KETCHUM; John W. et al.	

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	080	US7289570	10-30-2007	SCHMIDL; Timothy. et al.	
	081	US7298778	11-20-2007	VISOZ; Raphael. et al.	
	082	US7317750	01-08-2008	SHATTIL; Steve J.	
	083	US7342912	03-11-2008	KERR; Adam B. et al.	
	084	US7386076	06-10-2008	ONGGOSANUSI; Eko N. et al.	
	085	US7403748	07-22-2008	KESKITALO; Ilkka. et al.	
	086	US7421039	09-02-2008	MALAENDER; Laurence Eugene. et al.	
	087	US7606296	10-20-2009	HSU; Yungping. et al.	
	088	US20020018453	02-14-2002	YU, Yao; et al.	
	089	US20020044591	04-18-2002	LEE, Hyun-Woo; et al.	
	090	US20020098872	07-25-2002	JUDSON, Bruce A.	
	091	US20020181390	12-05-2002	MODY, Apurva N. et al.	
	092	US20030002450	01-02-2003	JALALI, Ahmad; et al.	
	093	US20030048856	03-13-2003	KETCHUM, John W. et al.	
	094	US20030139194	07-24-2003	ONGGOSANUSI, Eko N. et al.	
	095	US20030153360	08-14-2003	BURKE, Joseph P. et al.	
	096	US20030157954	08-21-2003	MEDVEDEV, Irina; et al.	
	097	US20030235255	12-25-2003	KETCHUM, John W. et al.	
	098	US20040087324	05-06-2004	KETCHUM, John W. et al.	
	099	US20070177681	08-02-2007	CHOI; In-Kyeong et al.	

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	100	US20020018310	02-14-2002	HUNG; Tsan-Yao.	
	101	US20020041632	04-11-2002	SATO; Kazushi. et al.	
	102	US20020057659	05-16-2002	OZLUTURK; Fatih M. et al.	
	103	US20020085620	07-04-2002	MESECHER; David K.	
	104	US20020085641	07-04-2002	BAUM; Kevin L.	
	105	US20020105928	08-08-2002	KAPOOR; Samir. et al.	
	106	US20020183010	12-05-2002	CATREUX; Severine E. et al.	
	107	US20020196842	12-26-2002	ONGGOSANUSI; Eko N. et al.	
	108	US20030078024	04-24-2003	MAGEE; David Patrick. et al.	
	109	US20030095197	05-22-2003	WHEELER; Richard B. et al.	
	110	US20030099306	05-29-2003	NILSSON; Johan. et al.	
	111	US20030162519	08-28-2003	SMITH; Martin. et al.	
	112	US20030206558	11-06-2003	PARKKINEN; Teemu. et al.	
	113	US20030235149	12-25-2003	CHAN; Albert. et al.	
	114	US20040085939	05-06-2004	WALLACE; Mark S. et al.	
	115	US20040179627	09-16-2004	KETCHUM; John W. et al.	
	116	US20040198276	10-07-2004	TELLADO; Jose. et al.	
	117	US20050047384	03-03-2005	WAX; Mati. et al.	
	118	US20050111599	05-26-2005	WALTON; J. Rodney. et al.	

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	119	US20050128953	06-16-2005	WALLACE; Mark S. et al.	
	120	US20060104196	05-18-2006	WU; Shiquan; . et al.	
	121	US20020115473	08-22-2002	HWANG, Jong Yoon ; et al.	
	122	US20020147953	10-10-2002	CATREUX, Severine ; et al.	
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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> - Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
	125	EP1185048	06-03-2002	NORTEL NETWORKS LTD [CA]		<input type="checkbox"/>
	126	CN1308794	08-15-2001	ARRAYCOMM INC [US]		<input checked="" type="checkbox"/>
	127	JP2002176379	06-21-2002	JAPAN TELECOM CO LTD		<input checked="" type="checkbox"/>
	128	WO199809381	03-05-1998	UNIV LELAND STANFORD JUNIOR [US]		<input type="checkbox"/>
	129	WO199830047	07-09-1998	ARRAYCOMM INC [US]		<input type="checkbox"/>
	130	WO2002003557	01-10-2002	IOSPAN WIRELESS INC [US]		<input type="checkbox"/>
	131	WO2002069523	09-06-2002	MAGNOLIA BROADBAND INC [US]		<input type="checkbox"/>
	132	DE19951525A1	06-07-2001	SIEMENS AG [DE].		<input checked="" type="checkbox"/>

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				Application Number	10/693,419
				Filing Date	2003-10-23
				First Named Inventor	J. RODNEY WALTON
				Art Unit	2467
				Examiner Name	SMITH, MARCUS
Sheet	8	of	11	Attorney Docket No: 020554	

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		Country Code <sup>3</sup> - Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	133	EP0805568A1	11-05-1997	TRW INC [US].		<input type="checkbox"/>
	134	EP0951091A2	10-20-1999	LUCENT TECHNOLOGIES INC [US].		<input type="checkbox"/>
	135	EP1087545A1	03-28-2001	UNIV SINGAPORE [SG].		<input type="checkbox"/>
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	137	EP1175022A2	01-23-2002	SAMSUNG ELECTRONICS CO LTD [KR].		<input type="checkbox"/>
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	141	RU2152132C1	06-27-2000	J NII SVJAZI. et al.		<input checked="" type="checkbox"/>
	142	WO0011823A1	03-02-2000	RADIX TECHNOLOGIES INC [US]. et al.		<input type="checkbox"/>
	143	WO0036764A2	06-22-2000	NOKIA NETWORKS OY [FI]. et al.		<input type="checkbox"/>
	144	WO0197400A2	12-20-2001	QUALCOMM INC [US].		<input type="checkbox"/>
	145	WO0201732A2	01-03-2002	NOKIA CORP [FI]. et al.		<input type="checkbox"/>
	146	WO02060138A2	08-01-2002	QUALCOMM INC [US].		<input type="checkbox"/>
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	148	WO03034646A2	04-24-2003	NORTEL NETWORKS LTD [CA].		<input type="checkbox"/>
	149	WO200171928	09-27-2001	QUALCOMM INC [US]		<input type="checkbox"/>

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				Examiner Name	SMITH, MARCUS
Sheet	9	of	11	Attorney Docket No: 020554	

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		Country Code <sup>3</sup> -Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	150	WO200171928	09-27-2001	QUALCOMM INC [US]		<input type="checkbox"/>
	151	WO9622662A1	07-25-1996	ARRAYCOMM INC [US].		<input type="checkbox"/>
	152	WO99016214	04-01-1999	COMMW SCIENT IND RES ORG [AU] ET AL.		<input type="checkbox"/>
	153	WO9957820	11-11-1999	ARRAYCOMM INC [US]		<input type="checkbox"/>
	154	WO04039022	05-06-2004	QUALCOMM INC [US]		<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

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	160	JONGREN et al., "Utilizing Quantized Feedback Information in Orthogonal Space-Time Block Coding," 2000 IEEE Global Telecommunications Conference, 2(4): 995-999, November 27, 2000.	
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	167	DAE-KO HONG, Young-Jo Lee, Daesik Hong, and Chang-Eon Kang. "Robust frequency offset estimation for pilot symbol assisted packet CDMA with MIMO antenna systems." Communications Letters. IEEE. June 2002.	
	168	S.W. WALES, A MIMO technique within the UTRA TDD standard 06/22/05.	

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